

Nature Notes

Wolf Lichen



One of the most eye-catching lichens in our region is the bright chartreuse wolf lichen, commonly seen on tree branches and old stumps throughout the East Kootenay. In the Kimberley Nature Park there are two species of wolf lichen: common wolf lichen or *Letharia Vulpina* which is widespread throughout the Park and Brown-eyed Wolf Lichen or *Letharia Columbiana* which is less common and usually found at higher elevations.



Lichens are amazing composite organisms created by a fusion of a fungus and an algae. The fungus provides the structure for the pair, and the algae, which lives within this structure, uses the energy of sunlight to make food for the whole organism. Lichens are exceedingly diverse and resilient and inhabit some of the most inhospitable environments on earth as well as the forests of the Kimberley Nature Park. They can survive long periods of drought, heat and cold and come in a stunning array of shapes and sizes ranging from thin crusts over rock to pendulous, hairy masses hanging from trees.

The bright greenish yellow colouring of wolf lichens comes from the presence of vulpinic acid and many cultures have used them as a source of dye for fabrics and other materials. Vulpinic acid is also poisonous and the use of the lichen in Europe in earlier times, to make poisons to kill wolves and foxes is the source of their common name.

There are reports that some North American first nations also used an extract from the lichen to coat their arrow points.

Distinguishing between our two species of lichens from a distance is difficult, but on closer inspection the Brown-Eyed variety is seen to have dark-coloured spots dotting its branches. These are apothecia, the fruiting bodies of the lichen and they produce spores which propagate the species. Common wolf lichen does not

have these structures and instead its branches are covered has small bumpy projections called isidia which easily break off and grow into a new individual.

Since Brown-Eyed Wolf lichen is relatively rare in the Park, please let us know if you see it so we can better understand the limits of its range.

